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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,188	04/01/2004	Katsumi Nishijima	8001-1195	6415
466 Young & Th	7590 04/24/2007 HOMPSON		EXAMINER	
745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			WENDELL, ANDREW	
			ART UNIT	PAPER NUMBER
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## Please find below and/or attached an Office communication concerning this application or proceeding.

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	-	Application No.	Applicant(s)		
Office Action Summary		10/814,188	NISHIJIMA ET AL.		
		Examiner	Art Unit		
	•	Andrew Wendell	2618		
	The MAILING DATE of this communication app				
Period fo	or Reply		· ·		
WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES OF STATUTORY PERIOD FOR REPLY PRISON OF STATES OF	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDON	N. imely filed  n the mailing date of this communication. ED (35 U.S.C. § 133).		
Status					
1)🛛	Responsive to communication(s) filed on 06 Fe	ebruary 2007.			
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.		
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-28 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-28 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	wn from consideration.			
Applicat	ion Papers				
*	The specification is objected to by the Examine				
10)	The drawing(s) filed on is/are: a) acce				
	Applicant may not request that any objection to the	- · · ·			
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	- · ·			
Priority (	under 35 U.S.C. § 119				
12)⊠ a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ved in this National Stage		
	ce of References Cited (PTO-892)	4) 🔲 Interview Summar			
2) Notice 3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No(s)/Mail E 5) Notice of Informal 6) Other:	Date		

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### DETAILED ACTION

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### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 5-7, 18-19, and 24-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Gauld et al. (US Pat Pub# 2004/0198435).

Regarding claim 1, Nishimura's portable apparatus teaches a mobile terminal 100 (Fig. 1), comprising a control unit 99 (Fig. 1; Section 0033; obvious there is a control unit to have communication); a display unit 54 and 4 (Fig. 1); an upper housing 51 (Fig. 1); a lower housing 2 (Fig. 1); and a 2-axis hinge unit 3 and 11 (Fig. 3) for coupling the housings 2 and 51 (Fig. 1); wherein a part of the 2-axis hinge unit 2 and 51 (Fig. 2) is exposed outside the terminal 1, 4, and 6 (Fig. 2), and an information input device 4 and 6 (Fig. 2) is mounted in the exposed portion. Nishimura fails to teach a pointing device and a control unit.

Gauld's camera integration on a mobile device teaches a pointing device 17 (Fig. 1) and a control unit 104 (Fig. 4).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a pointing

device as taught by Gauld into Nishimura's portable apparatus in order to provide an intuitive user interface (Sections 0013-0014).

Regarding claim 2, the combination including Gauld teaches wherein the control unit 104 (Fig. 4) controls the terminal according to an operation of the information input device 16 (Fig. 2).

Regarding claim 3, the combination including Gauld teaches wherein the control unit 104 (Fig. 4) assigns a predetermined function to the information input device (Section 0015).

Regarding claim 5, the combination including Gauld teaches wherein the control unit 104 (Fig. 4) assigns another operating function to the pointing device 17 (Fig. 1 and Sections 0024 and 0044).

Regarding claim 6, the combination including Gauld teaches wherein the information input device 17 (Fig. 1) further comprises a terminal operating function (Section 0024).

Regarding claim 7, the combination including Gauld teaches wherein the terminal operating function is performed by a press (Section 0024). Note, the user has to perform the function, so a press or some pressure has to be performed for a user to have function.

Regarding claim 18, the combination including Gauld teaches wherein the control unit detects an operation of a predetermined operation key to control an operation of the information input device (Section 0015).

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Regarding claim 19, the combination including Gauld teaches wherein the control unit controls an operation of the information input device while a predetermined operation key is operated (Section 0015).

Regarding claim 24, the combination including Nishimura teaches wherein the terminal is a mobile telephone 100 (Fig. 1).

Regarding claim 25, the combination including Nishimura teaches wherein the two axes of the 2-axis hinge are a folding axis and a rotation axis (Fig. 3), the upper housing 51 (Fig. 3), the lower housing 2 (Fig. 3) and the 2-axis hinge being constructed and arranged so that an end face of the 2-axis hinge on the horizontal axis is exposed to an outside of the mobile terminal both when the mobile terminal is in an open position and when the mobile terminal is in a closed position (Figs. 2, 5, and 7).

Regarding claim 26, the combination including Nishimura teaches wherein the end face is exposed on a side face of the lower housing (Fig. 3).

Regarding claim 27, the combination including Nishimura teaches wherein the information device is arranged on the end face of the 2-axis hinge (Figs. 3 and 5).

Regarding claim 28, Nishimura teaches a lower housing 2 (Fig. 3); a 2-axis hinge 11 and 3 (Fig. 3) the connected to the lower housing 2 (Fig. 3); an upper housing 51 (Fig. 3) connected to the 2-axis hinge 3 and 11 (Fig. 3); a display unit 54 (Fig. 3) disposed on the upper housing 51 (Fig. 3); a control unit 99 (Fig. 1; Section 0033; obvious there is a control unit to have communication); and wherein a part of the 2-axis hinge unit 3 and 11 (Fig. 3) is exposed outside the terminal 4 (Fig. 3) and 6 (Fig. 5), the

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information input device 4 (Fig 3) and 6 (Fig. 5) is mounted in the exposed portion.

Nishimura fails to teach a button and a control unit.

Gauld teaches a button 16 (Fig. 4) or 17 (Fig. 1) operatively connected to the control unit 104 (Fig. 4) for user input.

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 8, Nishimura's portable apparatus in view of Gauld's camera integration on a mobile device teaches the limitations in claim 1. Nishimura and Gauld fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a fingerprint sensor as taught by Schmitt into a pointing device as taught by Gauld into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

Regarding claim 9, the combination including Schmitt teaches wherein the control unit 207 (Fig. 15) can operate the terminal 190 (Fig. 15) when the fingerprint sensor 30 (Fig. 15) detects a predetermined input.

4. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Kim (US Pat# 6,621,066).

Regarding claim 10, Nishimura's portable apparatus in view of Gauld's camera integration on a mobile device teaches the limitations in claim 1. Nishimura and Gauld fail to teach position detection means.

Kim's optimizing opening and closing control of a sub-body in automatic and manual folder type mobile communication terminals teaches position detection means 236, 238, 300 and 302 (Fig. 4) for detecting relative positions between the upper housing and the lower housing

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a sensor detection means as taught by Kim into a pointing device as taught by Gauld into Nishimura's portable apparatus in order to have a more efficient and precise control for opening or closing the sub-body folder upon using of the terminal (Col. 1 lines 51-61).

Regarding claim 11, Kim further teaches wherein the control unit 200 (Fig. 3) controls the terminal based on an output of the position detection means 236 and 238 (Fig. 3).

Regarding claim 12, Gauld further teaches wherein the control unit 104 (Fig. 4) controls an operation of the information input device 16 (Fig. 4).

Regarding claim 13, Kim further teaches wherein the position detection means comprise a magnet 300 and 302 (Fig. 4) and a magnetic sensor 236 and 238 (Fig. 4).

Regarding claim 14, Kim further teaches wherein the magnet 300 and 302 (Fig. 4) and the magnetic sensor 236 and 238 (Fig. 4) are arranged in separate housings (Fig. 4).

Regarding claim 15, Kim further teaches wherein the magnetic sensor is a Hall element (Fig. 4).

Regarding claim 16, Kim further teaches wherein the position detection means detect a turning direction of the housings (Col. 2 line 1-Col. 3 line18).

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Kim (US Pat# 6,621,066) and further in view of Ikeda et al. (US Pat# 6,957,083).

Regarding claim 17, Nishimura's portable apparatus in view of Gauld's camera integration on a mobile device and further in view of Kim's optimizing opening and closing control of a sub-body in automatic and manual folder type mobile communication terminals teaches the limitations in claims 1, 10, and 16. Nishimura, Kim, and Gauld fail to teach a control unit controls the display unit based on the turning direction of the housings.

Ikeda's mobile telephone teaches wherein the control unit controls the display unit based on the turning direction of the housings (Col. 1 line 57-Col. 2 line 44 and Col. 3 line 41-Col. 5 line 60).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a control unit controls the display unit based on the turning direction of the housings as taught by Ikeda into a sensor detection means as taught by Kim into a pointing device as taught

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by Gauld into Nishimura's portable apparatus in order to make using the camera easier to use (Col. 1 lines 42-56).

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Wada et al. (US Pat Pub# 2003/0174240).

Regarding claim 20, Nishimura's portable apparatus in view of Gauld's camera integration on a mobile device teaches the limitations in claim 1. Nishimura and Gauld fail to teach a lock unit.

Wada's mobile telephone teaches a lock unit for locking the 2-axis hinge unit (Section 0055).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a pointing device as taught by Gauld into Nishimura's portable apparatus in order to increase security (Section 0017 and 0056).

Regarding claim 21, Wada further teaches wherein the lock unit is controlled by an input from the information input device (Section 0055).

Regarding claim 22, Wada further teaches wherein the information input device is a personal authentication sensor (Section 0055); and the lock unit is released when the sensor detects a predetermined input (Section 0055).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (US Pat# 6,957,083) in view of Wada et al. (US Pat Pub# 2003/0174240) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 23, Nishimura's portable apparatus in view of Gauld's camera integration on a mobile device and further in view of Wada's mobile telephone teaches the limitations in claims 1 and 20-22. Nishimura, Gauld, and Wada fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a fingerprint sensor as taught by Schmitt into a pointing device as taught by Gauld into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

## Response to Arguments

8. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Andrew Wendell Examiner

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4/11/2007

SUPERVISORY PATENT EXAMINER